

AMENDMENTS TO THE CLAIMS:

Claims 1-6 (Canceled).

Claim 7 (Previously Amended): A method for causing selective proliferation of a cell, said method comprising

(a) providing a cell including a chimeric protein comprising a first polypeptide and a second polypeptide, wherein said first polypeptide comprises a ligand binding domain of a steroid hormone receptor that, upon ligand binding, self-associates, and wherein said second polypeptide comprises a cytokine receptor or a part thereof that, upon said self-association of said first polypeptide, imparts proliferation activity to said cell; and

(b) exposing said cell to a ligand capable of binding to said ligand binding domain of said first polypeptide of said chimeric protein, thereby causing selective proliferation of said cell.

Claims 8-17 (Canceled).

Claim 18 (Previously Presented): The method of claim 7, wherein said steroid hormone receptor is an estrogen receptor.

Claim 19 (Previously Presented): The method of claim 7, wherein said second polypeptide comprising a cytokine receptor or a part thereof that imparts proliferation activity to said cell is derived from a G-CSF receptor.

Claim 20 (Previously Presented): The method of claim 7, wherein said cell is a blood cell.

Claims 21-33 (Canceled).

Claim 34 (New): A method for causing selective proliferation of a cell, said method comprising

(a) providing a cell comprising

(i) a desired exogenous gene; and

(ii) a gene encoding a chimeric protein comprising a first polypeptide and a second polypeptide, wherein said first polypeptide comprises a ligand binding domain of a steroid hormone receptor that, upon ligand binding, self-associates, and wherein said second polypeptide comprises a cytokine receptor or a part thereof that, upon said self-association of said first polypeptide, imparts proliferation activity to said cell; and

(b) exposing said cell to a ligand capable of binding to said ligand binding

domain of said first polypeptide of said chimeric protein, thereby causing selective proliferation of said cell.

Claim 35 (New): The method of claim 34, wherein said steroid hormone receptor is an estrogen receptor.

Claim 36 (New): The method of claim 34, wherein said second polypeptide comprising a cytokine receptor or a part thereof that imparts proliferation activity to said cell is derived from a G-CSF receptor.

Claim 37 (New): The method of claim 34, wherein said desired exogenous gene and said gene encoding a chimeric protein are located on the same molecule.

Claim 38 (New): The method of claim 34, wherein said desired exogenous gene and said gene encoding a chimeric protein are located on separate molecules.

Claim 39 (New): The method of claim 34, wherein said cell is a blood cell.

Claim 40 (New): A method for causing selective proliferation of a cell, said method comprising

(a) providing a cell including a vector that expresses a chimeric protein comprising a first polypeptide and a second polypeptide, wherein said first polypeptide comprises a ligand binding domain of a steroid hormone receptor that, upon ligand binding, self-associates, and wherein said second polypeptide comprises a cytokine receptor or a part thereof that, upon said self-association of said first polypeptide, imparts proliferation activity to said cell; and

(b) exposing said cell to a ligand capable of binding to said ligand binding domain of said first polypeptide of said chimeric protein, thereby causing selective proliferation of said cell.

Claim 41 (New): The method of claim 40, wherein said steroid hormone receptor is an estrogen receptor.

Claim 42 (New): The method of claim 40, wherein said second polypeptide comprising a cytokine receptor or a part thereof that imparts proliferation activity to said cell is derived from a G-CSF receptor.

Claim 43 (New): The method of claim 40, wherein said cell is a blood cell.

Claim 44 (New): A method for causing selective proliferation of a cell, said method comprising

(a) providing a cell including a vector that independently expresses

(i) a first gene that encodes a desired exogenous gene product; and

(ii) a second gene that encodes a chimeric protein comprising a first polypeptide and a second polypeptide, wherein said first polypeptide comprises a ligand binding domain of a steroid hormone receptor that, upon ligand binding, self-associates, and wherein said second polypeptide comprises a cytokine receptor or a part thereof that, upon said self-association of said first polypeptide, imparts proliferation activity to said cell; and

(b) exposing said cell to a ligand capable of binding to said ligand binding domain of said first polypeptide of said chimeric protein, thereby causing selective proliferation of said cell.

Claim 45 (New): The method of claim 44, wherein said steroid hormone receptor is an estrogen receptor.

Claim 46 (New): The method of claim 44, wherein said second polypeptide comprising a cytokine receptor or a part thereof that imparts proliferation activity to said cell is derived from a G-CSF receptor.

Claim 47 (New): The method of claim 44, wherein said cell is a blood cell.